FY01-1 (F)

To: Laurence Tunnell
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3/21/02

SITE: Brown's Dump
BREAK: 17.7
OTHER:

ASH MANAGEMENT PLAN

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
MR. JOE ALFANO - 1-404-562-8933

CITY OF JACKSONVILLE
SOLID WASTE DEPARTMENT
AND RESOURCE MANAGEMENT
(SWARM)
ASH MANAGER - 630-4185, Ext.241
PROJECT MANAGER - 630-4185, Ext. 232

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Specific Conditions

1. Prior to commencing work, the contractor must train all personnel employed on the project in the proper identification, safe handling, testing requirements and disposal of ash pursuant to the *City of Jacksonville's Ash Management Plan* (Attachment A) and *USEPA's Tips to Reduce Exposure to Contaminated Soils* (Attachment B).

2. The Contractor must notify the Department of Solid Waste and Resource Management at ~~665-8091~~ a minimum of forty-eight (48) hours prior to commencing work. 630-9185 – EXT. 241 OR EXT. 232

3. The Contractor must maintain a copy of the *Ash Management Plan* and *Tips to Reduce Exposure to Contaminated Soils* on-site while the job is in progress and a signed *Training Affidavit* (Attachment "C") confirming all employees have been properly trained pursuant to Specific Condition 1. The affidavit must include the name of each employee, signature, and the date they received the required training. A copy of the *Training Affidavit* must be faxed to the City of Jacksonville's Department of Solid Waste and Resource Management at (904) ~~665-8091~~ prior to commencing work.
630-9185 EXT: 232

5. All material excavated within the boundaries the ash study areas must be containerized, tested and disposed at a permitted facility pursuant to local, state and federal requirements. Clean soils excavated from these areas may be returned to the excavation from which they came. All work must be performed in accordance with the *Ash Management Plan.*

6. Upon completion of the project, a copy of all test results and proof of proper disposal (invoices) must be submitted to the City of Jacksonville, Department of Solid Waste and Resource Management, ~~515 North Laura Street, 6th Floor,~~ 140 W. MONROE ST. SUITE 200 Jacksonville Florida 32202, Attention Ash Site Project Manager.

7. Failure to abide by the Specific Conditions contained herein will result in suspension of the permit.

Incinerator Ash Material Management Plan

ATTACHMENT "A"

Introduction

The following Management Plan (hereinafter referred to as the "Plan") has been prepared as guidance on Incinerator Ash Material (hereinafter referred to "Ash") that may be encountered by Contractors performing construction/excavation projects for the City of Jacksonville (herein after referred to as "City"). This Plan may be incorporated into City construction contracts. If the contract does not include provisions on encounters with contaminated media generally, or Ash specifically, this guidance should be followed. The Plan includes the following:

- Procedures for identification of Ash,
- Procedures for notifications to City and regulatory officials,
- Procedures for handling, storing, and characterizing the Ash for proper disposal,
- Procedures for transporting the Ash to an approved facility for disposal, and
- Minimum requirements for documenting Ash handling and disposal activities.

The following sections detail the minimum procedures necessary for handling encountered Ash material.

Identification of Ash

Ash is referred to as material generated by melting and burning of municipal and household waste at incinerator facilities. According to City of Jacksonville - Solid Waste and Resource Management, most of the incinerator activities were conducted between the 1950s and 1960s. The Ash may be found in areas of the City where non-native material was used as backfill for parks, small creeks, ponds, etc.

The Ash may be visually identified by inspecting excavated soils for the presence of broken glass, pottery, pieces of metal, etc., darkened by the burning process. Ash is also commonly found fused together into uneven-shaped, variable-size pieces, with a reddish-orange color.

Notification and Suspension of Work

Immediately upon unexpectedly encountering suspected Ash-laden soils and unless the contract provides other procedures, the contractor must suspend work into Ash-laden media and notify the City's Project Manager. If the Project Manager and contractor disagree that Ash-laden soils have been encountered, an environmental consultant should be engaged to positively identify the material. Regardless of any disagreement between the Project Manager and the contractor about the nature of the material, the Project Manager shall immediately notify the Environmental Law Division, Office of General Counsel (OGC) at 904/630-1723 or 630-1700. OGC shall advise the Project Manager about which federal, state, and/or local environmental regulatory authorities to notify, to include contacting FDEP representative Ashwin B. Patel at (904)448-4320 ext 378.

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Handling, Sampling and Characterization of Ash

All Ash excavated before the suspension of work in contaminated soil shall be temporarily stored on-site, in lined roll-offs or, depending upon quantity, hazardous waste containers. On-site storage cannot exceed 90 days without a hazardous waste storage permit from the Florida Department of Environmental Protection (FDEP). Every reasonable effort should be made to remove Ash determined to be hazardous waste (HW) from the site within 30 days after characterization. In order to ensure disposal of HW within 90 days, if ash material is determined to be HW, the sampling should be completed within 15 days of discovery/excavation and sent for analysis. Under no circumstance should hazardous waste be stored on site for so long that a hazardous waste storage permit must be sought. Unless otherwise provided in the contract, the contractor, in consultation with the Project Manager, shall arrange for suitable storage containers, including roll-offs, and if necessary, off-site treatment or disposal. The City's Project Manager shall be responsible for determining when construction may resume.

The following is a recommended schedule of activities to ensure that excavated material gets disposed of in less than 90 days:

- Day 1 — Discovery or Removal and containerization of ash material
- Day 15 — Sampling
- Day 16-60 — Analysis
- Day 60-70 — Review analytical data/report and make HW determination
- Day 70-75 — Arrange for waste disposal
- Day 80-85 — Waste shipped off-site

Recognizing that some small amount of Ash-laden soil may have been excavated before the contractor's personnel conclude or suspect that Ash has been encountered, such excavated Ash material must initially be covered with visqueen, surrounded with a temporary fence, and posted with signs warning that the material may be hazardous. This work shall be performed by the contractor. This will limit the public's exposure to potential hazardous waste until suitable containers or roll-offs are mobilized onto the site, the appropriate regulatory authorities have been notified, and sampling the excavated soils has been done.

At a minimum, three to five samples from each roll-off, or one from each container must be collected for analyses of the eight Resource Conservation and Recovery Act (RCRA) metals (arsenic, barium, cadmium, chromium, lead, selenium, silver, and mercury) according to the Toxicity Characteristic Leaching Procedure (TCLP) (EPA Method 1311) to evaluate whether the excavated Ash is hazardous waste. Three to five samples with evidence of Ash from each roll-off or container must also be submitted for analyses of the parameters listed in EPA Method 6010 for total metal, EPA Method 8260 for Volatile Organic Compounds (VOCs), EPA Method 8270 for Semi-Volatile Organic Compounds (SVOCs), Polychlorinated Biphenyls (PCBs), Pesticides and Herbicides, Oil & Grease, and Total Recoverable Petroleum Hydrocarbons (TRPH) by the FL-PRO Method. Sample collection must be conducted under FDEP-approved Comprehensive Quality Assurance Project Plan (CQAPP), in accordance with the requirements listed by FDEP in

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DER QA-O01-"Standard Operating Procedures for Laboratory Operations and Sample Collection Activities."

When the environmental consultant for the contractor receives the laboratory analyses a copy of the laboratory reports shall be provided to the City's Project Manager. Also, copies of all analytical results should be provided to Ashwin B. Patel, FDEP. If the City has arranged for the laboratory analyses, copies of the laboratory report will be given to the contractor upon receipt. The contractor, or authorized environmental consultant, must review the results of the laboratory analyses to determine the hazardous characteristics of the Ash material. If the results of the TCLP (lower detection limits would have to be requested from the lab before the samples are run) or of the Synthetic Precipitation Leaching Procedure (SPLP) (EPA Method 1312) exceed the groundwater cleanup levels established in Chapter 62-277, FAC, or if total analyses concentrations exceed the Florida residential cleanup target goals, the material shall not be returned to the original excavation. If the results from the SPLP or the TCLP (modified for lower detection limits) are below the Florida groundwater cleanup levels and the total analyses concentrations are below Florida residential soil cleanup targets goals, the material may be returned to the original excavation area only with approval from the OGC and the FDEP.

Transportation and Disposal of Ash

If the ash has not been characterized as hazardous waste by TCLP, has SPLP (or TCLP with lower detection limits) results below Florida groundwater cleanup levels, and any hazardous substances in the material are below Florida residential soil cleanup target goals under Chapter 62-277, FAC, it may be returned to the excavation or used elsewhere in the vicinity of the excavation/construction (if the material is suitable for that purpose). If the ash is characterized as containing a hazardous substance in excess of State soil cleanup target goals, but not as hazardous waste, arrangements may be made, with guidance from OGC, to dispose of the material as a special waste at an appropriately licensed landfill. If, however, the Ash is characterized as hazardous waste, it must be taken to a licensed hazardous waste treatment or disposal facility.

Upon characterization of the Ash by TCLP as a hazardous waste that must be taken to a licensed hazardous waste treatment or disposal facility, it need not be further characterized using the Toxicity Characteristic Leaching Procedure (TCLP) for the eight RCRA metals, unless required by the treatment or disposal facility. The fencing and signage originally installed shall remain in place until the material has been removed from the site.

Disposal of excavated Ash that has been characterized as hazardous waste shall be properly packaged for transportation, which shall be conducted by a licensed hazardous waste transporter to a licensed treatment or disposal facility.

Ash that is not hazardous waste may, with the concurrence of the City's Solid Waste and Resource Management Department, be sent to Trail Ridge Landfill in Jacksonville, Florida for proper disposal. The procedures for non-hazardous waste transport to and disposal at Trail Ridge Landfill are as follows:

- Notify Trail Ridge Landfill with the estimated amount of material requiring disposal,

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- Prepare and submit disposal profiles to the landfill for approval. Profiles sheets may be obtained directly from the landfill by calling Linda Hair at (904) 289-9100. Laboratory results must be included with the profile sheets for approval by the landfill,
- Obtain transportation manifests after approval of the profiles by the landfill, and
- Mobilize roll-offs to landfill for disposal.

Note: *Transportation manifests will be provided by the landfill upon approval of the material for disposal. The number of manifests will depend on the number of loads or roll-offs requiring transportation to the landfill.*

The contractor or designated environmental consultant will be responsible for signing the transportation manifest on behalf of the City.

In the event large quantities must be handled, the contractor or environmental consultant shall:

- Properly identify the analytes exceeding TCLP levels that characterize the Ash as a hazardous waste. The contractor or environmental consultant must notify the City immediately upon determining that the Ash is a hazardous waste,
- Determine the most cost effective method for transportation and disposal of the hazardous waste,
- Contact an approved hazardous waste transportation facility to mobilize the Ash material. The contractor or environmental consultant will be responsible for obtaining all applicable transportation manifests,
- Obtain acceptance of the material for disposal into an approved hazardous waste disposal facility, and ensure compliance with all local, State and Federal disposal requirements.

Documentation

The environmental consultant conducting the analyses shall submit a report to the contractor and the Project Manager indicating the results of the laboratory analyses. If the material is to be disposed of as hazardous waste or non-hazardous special waste, the contractor shall determine the amount of Ash material to be containerized and/or transported to an appropriate treatment or disposal facility. The contractor shall be responsible for documenting the proper disposition of the Ash, including but not limited to, transportation and disposal manifest, characterization reports, and disposal weigh tickets.

Safety

Depending upon the laboratory analyses of the Ash material, further excavation of Ash may require the use of 40-hour OSHA trained personnel. Ordinarily, environmental consultants assign such trained personnel to conduct Ash sample collection. Investigations have concluded that Ash may contain elevated levels of arsenic and lead; therefore, proper handling of the material by trained OSHA personnel may be necessary.

Tips to Reduce Exposure to Contaminated Soils

ATTACHMENT "B"

1. All site workers must wash their hands prior to eating, smoking or leaving the site
2. Do not excavate the site during periods of high winds or when children are present.
3. Use dust suppression to reduce airborne emissions.
4. All site workers should clean their boots prior to leaving the site to avoid tracking contaminated soils to their vehicles and homes.
5. Ensure that all vehicles are washed prior to leaving the site to avoid tracking contaminated soils through the community.
6. All site workers should be provided a place to change from work clothes to clean clothes to avoid tracking contaminated soils to their vehicles and homes.
7. Maintain a strong site perimeter to ensure non-site workers are kept out of the work area.

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AFFIDAVIT OF TRAINING
Attachment "C"

Permit Number:_____ Location:_____
Description of Work:_____
Method of Construction: _____
Name of Contractor:_____
Address:_____
Telephone No.:_____ Emergency Telephone No._____
On-site Project Manager/Supervisor:_____

Record of Employee Training

Name	Date of Training	Signature

Certification/Affirmation (Must be signed by on-site project Manager/Supervisor)

I, _____, certify/affirm that the person(s) listed above have been trained in the proper identification, safe handling, testing requirements and disposal of ash and/or ash contaminated materials pursuant to the City of Jacksonville's *Ash Management Plan* and USEPA's *Tips to Reduce Exposure to Contaminated Soils.*

_____, Date: _____, Title:_____
Signature